

CLAIMS

What is claimed is:

1. A color selection method comprising:
 - (a) entering identification criteria of a color of a coating composition into a computer (10);
 - (b) initiating a search of a first database to identify one or more color characteristics that match the identification criteria;
 - (c) accessing said color characteristics from said first database;
 - (d) converting said color characteristics into color reference chips;
 - 10 (e) displaying said color reference chips on screen of said computer (10);
 - (f) selecting a desired color reference chip from said color reference chips;
 - (g) accessing one or more color formulas from a second database that match said desired color reference chip;
 - 15 (h) displaying said color formulas on said screen; and
 - (i) selecting a desired color formula from said color formulas.
2. The method of claim 1 further comprising storing for future use on said computer (10) said desired color formula, said desired color reference chip, said identification criteria, or a combination thereof.
3. The method of claim 1 further comprising displaying said identification criteria on said screen.
4. The method of claim 1 further comprising displaying said identification criteria and said color formulas on said screen.
- 25 5. The method of claim 1, 3 or 4 further comprising printing an image of said screen on a printable sheet on a printer 14.
6. The method of claim 5 wherein said printable sheet is a photocopy paper, high gloss photographic quality paper or a high gloss plastic film.
- 30 7. The method of claim 6 wherein said printable sheet is provided with a comparison window positioned within the area on said printable sheet over which each said color reference chip is printed.

8. The method claim 1 wherein further comprising printing an identifying label of the coating composition.
9. The method of claim 1 wherein said identification criteria comprise one or more of a manufacturer name, make, model, year of
- 5 production, color name, paint code, cross reference information, intended use, VIN number, or spectrophotometric data of a vehicle or its color.
10. The method of claim 1 wherein said desired color formula is sent to a dispenser or a weighing scale.
11. The method of claim 1 wherein said color characteristics
- 10 comprise spectral data of said color.
12. The method of claim 11 wherein said converting step comprises:
 - accessing L,a,b data of said color;
 - transforming said L,a,b data into RGB data of said color; and
 - 15 formatting said RGB data into said color reference chips.
13. The method of claim 1 wherein said computer is a client computer (10A) in communication with a host computer (16).
14. The method of claim 13 wherein said first database resides on said client computer (10A) and said second database resides on said host computer (16), said first and said second database reside on said host computer (16), or said first and said second database reside on said client computer (10A).
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15. A color selection method comprising:
 - (a) entering identification criteria of a color of a coating composition
 - 25 into a client computer (10A);
 - (b) initiating a search of first database stored on said client computer (10A) to identify one or more color characteristics that match the identification criteria;
 - (c) accessing said color characteristics from said first database;
 - 30 (d) converting said color characteristics into color reference chips;
 - (e) displaying said color reference chips on screen of said client computer (10A);

- (f) selecting a desired color reference chip from said color reference chips displayed on said screen;
- (g) sending chip identification data on said desired color reference chip to said host computer (16);
- 5 (h) receiving from said host computer (16) one or more color formulas that match said desired color reference chip, wherein said color formulas are stored in a second database on said host computer (16);
- (i) displaying said color formulas on screen of said client computer (10A); and
- 10 (j) selecting a desired color formula from said color formulas.

16. A color selection method comprising:

- (a) receiving from a client computer (10A) an identification criteria of a color of a coating composition, said client computer (10A) being in communication with a host computer (16);
- 15 (b) sending to said client computer (10A) one or more color reference chips converted by said host computer (16) from color characteristics that match the identification criteria of said color;
- (c) receiving from said client computer (10A) chip identification data on said desired color reference chip selected by said client computer (10A) from said color reference chips; and
- 20 (d) sending to said client computer (10A) one or more color formulas that match said desired color reference chip to allow selection of a desired color formula from said color formulas.

17. A computer program product comprising:

- 25 (a) a computer usable storage medium (11) having computer readable program code means embodied therein for causing selection of a desired color formula by a computer (10), said computer readable program code comprising:
- (b) computer readable program code devices configured to cause said computer (10) to enter identification criteria of a color of a coating composition into said computer (10);
- 30 (c) computer readable program code devices configured to cause said computer (10) to initiate a search of a first database for identifying

one or more color characteristics that match the identification criteria, wherein said first database is stored on said computer (10);

(d) computer readable program code devices configured to cause said computer (10) to access said color characteristics from said first

5 database;

(e) computer readable program code devices configured to cause said computer (10) to convert said color characteristics into color reference chips;

10 (f) computer readable program code devices configured to cause said computer (10) to display said color reference chips on screen of said computer (10);

(g) computer readable program code devices configured to cause said computer (10) to select a desired color reference chip from said color reference chips;

15 (h) computer readable program code devices configured to cause said computer (10) to access one or more color formulas that match said desired color reference chip wherein said color formulas stored in a second database on said computer (10); and

20 (i) computer readable program code devices configured to cause said computer (10) to display said color formulas on said screen.

18. A computer program product comprising:

(a) a client computer usable storage medium (11A) having computer readable program code means embodied therein for causing selection of a desired color formula by a client computer (10A) in communication with a host computer (16), said client computer readable program code comprising:

(b) computer readable program code devices configured to cause said client computer (10A) to enter identification criteria of a color of a coating composition into said client computer (10A);

30 (c) computer readable program code devices configured to cause said client computer (10A) to initiate search of a first database for identifying one or more color characteristics that match the identification criteria, said first database being stored on said client computer (10A);

- (d) computer readable program code devices configured to cause said client computer (10A) to access said color characteristics from said first database;
- (e) computer readable program code devices configured to cause said client computer (10A) to convert said color characteristics into color reference chips;
- (f) computer readable program code devices configured to cause said client computer (10A) to display said color reference chips on screen of said client computer (10A);
- 10 (g) computer readable program code devices configured to cause said client computer (10A) to send from said client computer (10A) to said host computer (16) identification data on a desired color reference chip selected from said color reference chips displayed on said screen;
- 15 (h) computer readable program code devices configured to cause said client computer (10A) to receive from said host computer (16) one or more color formulas that match said desired color reference chip, said color formulas being stored in a second database on said host computer (16); and
- 20 (i) computer readable program code devices configured to cause said client computer (10A) to display said color formulas on screen of said client computer (10A) to allow selection of said desired color formula from said color formulas.

19. The client computer program product of claim 18 wherein said client computer readable program code further comprises computer readable program code devices configured to cause said client computer (10A) to print on a printer (14A) an image of said displayed screen on a printable sheet, said desired color formula from said color formulas or both.

20. A host computer program product comprising:

- 30 (a) a host computer usable storage medium (16A) having computer readable program code means embodied therein for causing selection of a desired color formula by a client computer (10A) in communication with said host computer (16), said host computer readable program code comprising:

- (b) computer readable program code devices configured to cause said host computer (16) to receive from said client computer (10A) an identification criteria of a color of a coating composition;
- 5 (c) computer readable program code devices configured to cause said host computer (16) to send said client computer (10A) one or more color reference chips converted by said host computer (16) from color characteristics that match the identification criteria of said color;
- 10 (d) computer readable program code devices configured to cause said host computer (16) to receive from said client computer (10A) chip identification data on said desired color reference chip selected by said client computer (10A) from said color reference chips; and
- 15 (e) computer readable program code devices configured to cause said host computer (16) to send to said client computer (10A) one or more color formulas that match said desired color reference chip to allow selection of a desired color formula from said color formulas.

21. A process for making coating composition comprising:

- (a) entering identification criteria of a color of a coating composition into a computer (10A);
- 20 (b) initiating a search of a first database to identify one or more color characteristics that match the identification criteria, said first database being stored on said computer (10A);
- (c) accessing said color characteristics from said first database;
- (d) converting said color characteristics into color reference chips;
- 25 (e) displaying said color reference chips on screen of said computer (10A);
- (f) selecting a desired color reference chip from said color reference chips;
- (g) accessing one or more color formulas from a second database that match said desired color reference chip, said second database being stored on said computer (10A);
- 30 (h) displaying said color formulas on said screen;
- (i) selecting a desired color formula from said color formulas; and

(j) mixing components listed in said desired color formula to form said coating composition.